IN THE CLAIMS

No amendments are made to the claims, which are reproduced for the Examiner's convenience below:

1. (PREVIOUSLY PRESENTED) A communications system, comprising:

a gateway, communicatively coupleable to a terrestrially-based network;

a plurality of communications platforms, each of the plurality of communications platforms disposed in a stratospheric location, for transponding information between at least one of a plurality of user terminals and the gateway, wherein the plurality of communications platforms travels on a path having a radius D and wherein a distance between each platform is approximately 8.6D.

2. (ORIGINAL) The communications system of Claim 1, wherein the gateway aggregates all data traffic comprising the information between the plurality of user terminals.

3. (ORIGINAL) The communications system of Claim 1, wherein the gateway aggregates all data traffic comprising the information between each of the user terminals and the terrestrially-based network.

4. (PREVIOUSLY PRESENTED) The communications system of Claim 1, wherein:

the user terminal includes an unsteered user terminal antenna characterizable by a beamwidth; and

the communications platform maintains an apparent position relative to the user terminal within the beamwidth of the user terminal antenna.

5. (ORIGINAL) The communications system of Claim 1, wherein the system comprises more than one communications platform.

6. (PREVIOUSLY PRESENTED) The communications system of Claim 5, wherein the gateway directly communicates with more than one communications platform.

7. (ORIGINAL) The communications system of Claim 6, wherein the user terminal communicates with only one communications platform.

8. (ORIGINAL) The communications system of Claim 1, wherein the user terminal communicates with the communications platform in a first frequency band, and the communications platform communicates with the gateway in a second frequency band.

9. (PREVIOUSLY PRESENTED) The communications system of Claim 1, wherein the stratospheric location of the communications platform is within a predetermined distance of the user terminal to maintain communications between the communications platform and the user terminal.

10. (ORIGINAL) The communications system of Claim 1, wherein the gateway comprises a plurality of gateway antennae, separated from each other by a distance sufficient to provide spatial diversity in communicating with the communications platform.

11. (ORIGINAL) The communications system of claim 10, wherein the user terminals communicate with the communications platform using a communication diversity selected from the group comprising:

spatial diversity; and

polarization diversity.

12. (ORIGINAL) The communications system of Claim 1, wherein the system comprises at least two communication platforms in overlapping positions.

13. (ORIGINAL) The communications system of claim 1, wherein each user terminal is associated with a cell and user terminals in overlapping cells communicate with different communications platforms through spatial diversity.

14. (ORIGINAL) The communication system of Claim 1, wherein the information is transponded according to a coding technique selected from the group comprising time division multiple access (TDMA) and code division multiple access (CDMA).

15. (PREVIOUSLY PRESENTED) A communications signal, generated by performing the steps of:

receiving a first signal from a user terminal having a user terminal antenna in one of a plurality of stratosphere-based communications platforms travelling on a path having a radius D and wherein a distance between each platform is approximately 8.6D, wherein the communications platform maintains an apparent position relative to the user terminal within a beamwidth of the user terminal antenna; and

transponding the first signal from the one of the stratosphere-based communications platforms to a gateway ground station.

16. (ORIGINAL) The signal of claim 15, wherein the terrestrially-based network is the Internet.

17. (ORIGINAL) The signal of claim 15, wherein the first signal is transmitted in one of a plurality of beams to the gateway ground station having a plurality of antennae disposed to provide spatial diversity among each of the plurality of beams.

18. (PREVIOUSLY PRESENTED) A method for communicating from a user terminal, comprising:

receiving a first signal from the user terminal having an antenna in one of a plurality of stratosphere-based communications platforms travelling on a path having a radius D and wherein a distance between each platform is approximately 8.6D, wherein the communications platform maintains an apparent position relative to the user terminal within a beamwidth of a user terminal antenna; and

transponding the first signal from the one of the stratosphere-based communications platforms to a gateway ground station.

19. (ORIGINAL) The method of claim 18, further comprising the steps of:

receiving the first signal from the gateway ground station in the communications platform; and

transponding the first signal from the communications platform to a second user terminal.

20. (ORIGINAL) The method of claim 18, further comprising the steps of:

transmitting the first signal from the gateway ground station to the terrestrially-based network.

21. (ORIGINAL) The method of claim 20, wherein the terrestrially-based network is the Internet.

22. (ORIGINAL) The method of claim 18, wherein the first signal is transponded by one of a plurality of beams to the gateway ground station having a plurality of antennae disposed to provide spatial diversity among each of the plurality of beams.

23. (PREVIOUSLY PRESENTED) A communications system, comprising:

a user terminal for transmitting and receiving data through a terrestrial-based network; and

wherein the user terminal communicates with a gateway via a stratospheric-based communications platform transponder disposed on one of a plurality of communications platforms traveling on a path having a radius D and wherein a distance between each platform is approximately 8.6D.

24. (PREVIOUSLY PRESENTED) The communications system of claim 23, wherein:

the user terminal includes an unsteered user terminal antenna characterizable by a beamwidth; and

the communications platform maintains an apparent position relative to the user terminal within the beamwidth of the user terminal antenna.

25. (ORIGINAL) The communications system of claim 23, wherein the user terminal communicates with the communications platform in a first frequency band, and the communications platform communicates with the gateway in a second frequency band.

26. (ORIGINAL) The communications system of claim 23, wherein the gateway comprises a plurality of gateway antennae, separated from each other by a distance sufficient to provide spatial diversity in communicating with the communications platform.

27. (ORIGINAL) The communications system of claim 26, wherein the distance is at least 200 meters.

28. (PREVIOUSLY PRESENTED) A communications system, comprising:

a plurality of communications platforms, each of the communications platforms being located in a substantially geostationary stratospheric location and travelling on a path having a radius D and wherein a distance between each platform is approximately 8.6D, the communications platform having a transponder for communicating directly with a user terminal, for receiving information from the user terminal and for transmitting information to the user terminal; and

a gateway, communicating with the one of the plurality of communications platforms, for coupling the user terminal with a terrestrial-based network through the communications platform.

29. (PREVIOUSLY PRESENTED) The communications system of Claim 28, wherein the system comprises more than one communications platform.

30. (PREVIOUSLY PRESENTED) The communications system of Claim 29, wherein the gateway communicates with more than one communications platform.

31. (PREVIOUSLY PRESENTED) The communications system of Claim 30, wherein the user terminal communicates with only one communications platform.

32. (PREVIOUSLY PRESENTED) The communications system of Claim 28, wherein the user terminal communicates with the communications platform in a first frequency band, and the communications platform communicates with the gateway in a second frequency band.

33. (PREVIOUSLY PRESENTED) The communications system of Claim 28, wherein the stratospheric location of the communications platform is within a predetermined distance of the user terminal to maintain communications between the communications platform and the user terminal.

34. (PREVIOUSLY PRESENTED) The communications system of Claim 28, wherein:

the user terminal includes a user terminal antenna characterizable by an untrackable beamwidth; and

the communications platform stays within the beamwidth of the user terminal antenna.

35. (PREVIOUSLY PRESENTED) A communications signal, generated by performing the steps of:

sending a first signal from the user terminal to one of a plurality of stratosphere-based substantially geostationary communications platforms, each traveling on a path having a radius D and each distant from a neighboring platform by approximately 8.6D;

transponding the first signal from the one of the plurality of substantially geostationary stratosphere-based communications platform to a gateway ground station; and

transmitting the first signal from the gateway ground station to the terrestrial based network.

36. (PREVIOUSLY PRESENTED) The communications signal of Claim 35, wherein the first signal is transmitted from the user terminal to the stratosphere-based substantially geostationary communications platform by a user terminal antenna characterizable by an untrackable beamwidth, and the communications platform stays within the beamwidth of the user terminal antenna.

37. (PREVIOUSLY PRESENTED) A method for communicating between a user terminal and a terrestrial-based network, comprising:

sending a first signal from the user terminal to one of a plurality of substantially stationary stratosphere-based communications platforms, each traveling on a path having a radius D and each distant from a neighboring platform by approximately 8.6D;

transponding the first signal from the one of the substantially stationary stratosphere-based communications platform to a gateway ground station; and

transmitting the first signal from the gateway ground station to the terrestrial based network.

38. (PREVIOUSLY PRESENTED) The method of Claim 37, wherein the first signal is sent from the user terminal to the stratosphere-based substantially geostationary communications

platform by a user terminal antenna characterizable by an untrackable beamwidth, and the communications platform stays within the beamwidth of the user terminal antenna.

39. (PREVIOUSLY PRESENTED) A communications system, comprising:

a user terminal for transmitting and receiving data through a terrestrial-based network, wherein the user terminal communicates directly with a transponder on one of a plurality of communications platforms located in a substantially geostationary stratospheric location, each of the platforms traveling on a path having a radius D and each distant from a neighboring platform by approximately 8.6D; and

a gateway, communicating with the communications platform, for communicatively coupling the terrestrial based network to the user terminal through the communications platform.

40. (PREVIOUSLY PRESENTED) The communications system of Claim 39, wherein the user terminal comprises a user terminal antenna characterizable by an untrackable beamwidth, and the communications platform stays within the beamwidth of the user terminal antenna.

41. (PREVIOUSLY PRESENTED) The communications system of claim 1, wherein the communications platforms are hexagonally packed.

42. (PREVIOUSLY PRESENTED) The communications signal of claim 15, wherein the communications platforms are hexagonally packed.

43. (PREVIOUSLY PRESENTED) The method of claim 18, wherein the communications platforms are hexagonally packed.

44. (PREVIOUSLY PRESENTED) The communications system of claim 23, wherein the communications platforms are hexagonally packed.

45. (PREVIOUSLY PRESENTED) The communications system of claim 28, wherein the communications platforms are hexagonally packed.

46. (PREVIOUSLY PRESENTED) The communications signal of claim 35, wherein the communications platforms are hexagonally packed.

47. (PREVIOUSLY PRESENTED) The method of claim 37, wherein the communications platforms are hexagonally packed.

48. (PREVIOUSLY PRESENTED) The communications system of claim 39, wherein the communications platforms are hexagonally packed.